



# Managed VMware Cloud Service Description

## **MANAGED SERVICE PARTNERSHIP**

Public VMware  
Hybrid VMware  
Private VMware

## Introduction

Technology promises the world—streamlined infrastructure, instant scalability, seamless cloud migrations, and much more. But technology doesn't live up to its promise without a trusted advisor.

The Deft team humanizes technology. We actively listen to our clients, learning and collaborating to develop tailored proposals that perfectly fit your company's needs. We then design, build, operate, secure, and scale unique technology solutions with a singular purpose: to deftly deliver on the promise of technology for you and your customers.

**We make a difference for our clients daily.** We anticipate your needs, and consistently bring thought leadership and expertise to every encounter.

**We push our potential to maximize yours.** Growing our skill sets, embracing change, innovating, optimizing, and setting new standards: these are Deft's core operating principles.

**We always find a way forward.** Creativity is fundamental to our problem-solving process. Strong, well-informed perspectives guide our strategic decisions and define our products and services.

**We care, and we show up.** We're the right partner. We believe in your business and in your ability to succeed. Your issues and needs drive our mission every day.

**Deft: the most trusted technology partner since 2000.**

## Service Overview

Deft's Managed VMware Cloud Service is a flexible, scalable, and secure Infrastructure as a Service (IaaS) offering, allowing customers to scale VMware resources in response to changing business needs.

### Enterprise-Class Infrastructure

Each Managed VMware Cloud is delivered on an enterprise-class stack, using redundant servers, multi-gigabit networking, high performance storage, and an enterprise-class VMware-based virtualization platform. These solutions are architected for applications with performance requirements.

### Granular Resource Allocation

Clients are allocated resource pools in Deft managed VMware Cloud environments. Each resource pool includes a flexible configuration of network, compute, memory, storage, bandwidth and security services, as well as the software and access methods required to utilize the cloud resources.

### Multiple Locations

Managed VMware Cloud environments are delivered from Deft data centers in multiple geographies including Elk Grove Village, IL, Ashburn, VA and San Jose, CA. Geographic diversity gives you the option to deploy resources in in the most appropriate locations to serve your customers, employees and partners.

International locations are also available for Private Cloud environments. Please contact us to learn more about international deployments.

### Configurations

Deft delivers Managed VMware Cloud environments in private, public and hybrid configurations.

Direct, secure, performant connectivity between Deft data centers and your corporate facilities or third-party locations is also available.

## MSP Roles and Responsibilities

Successful Cloud MSPs are the result of transparency and collaboration. Clearly defined processes and a detailed outline of roles and responsibilities are where this collaboration begins.

At Deft, we go far beyond other MSPs. Based upon 20+ years of MSP experience, we begin our partnerships by listening. It is only after we understand where you are, and where you want to go, that we begin the pursuit of your outcomes.

Our Cloud MSPs are preceded by defined Consult and Plan, Design and Build processes. These critical steps establish the foundation for the execution of the MSP and a successful, long-term partnership between our firms.

### Consult

We follow a proven, structured process of automated data collection and personal interviews with key business stakeholders, IT infrastructure, and application teams to successfully complete the Discovery process.

The outcome of these efforts includes identification of business rules, infrastructure inventories, application inventories, and dependencies of your business. This comprehensive dataset is then synthesized, and we merge your unique requirements and our experience in engineering cloud solutions to create the migration/remediation/adoption project deliverable optimized for you and your business.

The initial Consultation sessions are conducted with your company's subject matter experts (SMEs) and our cloud

services team. These sessions serve to compile requirements and information about the current state of your business, IT operations, and future. This helps us prioritize your goals, discover current challenges you're facing, and explore how we can support you in solving them.

### *Identify Challenges/Objectives*

We begin each Consultation session with a workshop designed to identify the top-level challenges you are looking to solve or opportunities you wish to pursue.

### *Identify Business Drivers*

In the same manner we identify the challenge or opportunity at hand, we also look specifically at the underlying business drivers. What are you basing your technology decisions on? What key performance indicators (KPIs) are we working towards? Do these KPIs exist today? If not, are the new KPIs already agreed upon and ready to be implemented?

### *Align Business Drivers with the Project*

We've identified the "What", so we now strive to answer, "Why does this really matter?" In what true sense will this project impact the business? Is this project going to reduce costs? Is this project going to introduce revenue generation opportunities? Are there other aspects of alignment that are not clearly visible or easily understood? We will also discuss a critical question:

Why do you feel engaging a third-party going forward will help you with this project?

## ***Identify Project Ownership***

This effort creates a comprehensive stakeholder map for the project, including peering with our experts. We'll identify who is ultimately responsible for this project at the operational level, the technical level, the business level, and the financial level and keep everyone engaged and informed throughout.

## ***Current Infrastructure Assessment***

We review each infrastructure element (network, compute, storage, security, etc.) and collaborate with you to determine the desired end state. We will advise you on network topology and connectivity. We will deliver a high-level governance architecture, infrastructure architecture and network design that meets the needs of your business. We will deliver recommendations that apply the best practices in operation, governance and security. We will provide continuous feedback to your leadership and IT staff by using the time together to advise on best practices and provide recommendations as topics are discussed.

## ***Current Application Assessment(s)***

We review each workload and collaborate with you to determine the desired end state in the Cloud. We will deliver recommendations that apply our best practices in application deployment, management, administration and monitoring. We provide continuous feedback to your leadership and IT staff by using the time together to advise on best practices and provide recommendations as topics are discussed.

## ***Application Dependency Mapping***

This effort brings the Infrastructure and Application Assessments one level deeper by looking at the logical and physical dependencies between each application and infrastructure element. The final Application Dependency Map will reveal which applications and infrastructure elements interact with one another and how these dependencies impact the operation of the business and, ultimately, architectural decisions.

## ***Application and Business Process Alignment***

Finally, we will look at how each Application and Infrastructure element connects to your business processes. How are they used by the business and within what business processes are they applicable? How are the applications indirectly connected (e.g. via manual processes and data sharing)?

## ***Discovery Deliverable***

Upon completion of the Consultation phase, you will receive a detailed assessment highlighting critical requirements and opportunities for your cloud strategy and environment. This assessment outlines the critical steps for you, should you wish to continue down this path on your own. However, should you wish to continue working with us, we will move into the next phase: Plan, Design and Build.

## Plan and Design

The data gathered and objectives defined in the Consultation phase inform the build out of a detailed cloud strategy that aligns specifically with your desired business outcomes. Plan, Design and Build brings these to life.

### *Greenfield Architecture*

The Consultation process enables us to develop a list of possible solutions that can help you achieve your desired outcomes for your applications, workloads, data and business. The Greenfield Architecture includes reference architectures, highlighting our recommendations based upon the information we have to date. We will then collaborate to determine whether this will meet your needs (e.g. skillset, experience, desired future states) or not, and adjust accordingly. This is an iterative process that results in the development of a proof of concept – the formal framework and processes necessary to achieve the desired outcomes.

### *Total Cost of Ownership*

These reference architectures are all created with ongoing operational costs in mind. You will receive clear, concise and transparent operational cost estimates for all architecture considerations. These estimates will be updated at the proof-of-concept phase and, again, when you transition into the formal Cloud Managed Service Partnership program.

### *Migration Planning*

Migrations, whether they are refactors, re-platforms or the development of net-new environments, are planned and executed in an iterative manner. This includes the migration techniques. This methodology enables us to accurately reflect the fluidity of migration projects and what will be rapidly evolving desired outcomes.

### *Compliance Requirements*

Stakeholders throughout the business will contribute to this effort so that a thorough understanding of your compliance requirements, today's and tomorrow's, is identified and accounted for in the final environment.

### *Scale Requirements*

Scale is a bidirectional process. We will collaborate to identify your optimal patterns for scaling. Does your business scale linearly? Is it seasonal, with regular spikes in demand? Are there irregular spikes? We will identify, evaluate and account for the scale up and the scale down requirements of your business so system availability, performance and cost remain aligned.

### *Plan and Design Deliverable*

Upon completion of the Plan and Design phase, you will receive a detailed roadmap for the Build phase of your cloud environment.

The roadmap outlines the critical steps for you, should you wish to continue down this path on your own. However, should you wish to continue working with us, we will move into the next phase with you: Build.

## **Build**

### ***Proof of Concept/Pilot Environment***

This is the development of the selected Greenfield Architecture. This is a development-focused environment architected and deployed to mimic what we've agreed upon as the proper environment for your business. This environment will be used to seed the production environment once it is ready.

### ***Environment Build-Out***

Once the Proof of Concept/Pilot Environment is approved, we will begin the production Environment Build-Out. Once final adjustments have been made, this environment will be ready and available for production.

### ***Existing Environment Remediation***

As your business changes, your cloud environment will need to change to meet it. If we are onboarding an existing environment, this is where we begin working together, as planning and design are complete and there is already confidence in the operation and reliability of the current environment. This is where we introduce our best practices to your environment and make sure everything is ready for management within the formal Cloud MSP.

### ***Deployment Automation***

All Deft Cloud MSP environments are with automation in mind. This focus is critical to ensuring the environment is stable, can meet your deployment schedules, and can quickly meet the changing needs of your business. For many organizations, this will include comprehensive CI/CD pipeline design, development and deployment across infrastructure and applications.

### ***Build Deliverable***

Upon completion of the Build process, we work with your team to migrate to your new production environment. We apply guidance and best practices gained through our operating experience and supported by our cloud partners (AWS, Microsoft Azure, and VMware).

## Run and Operate

Now that your environment is successfully migrated to the cloud and verified as ready for production, the official MSP can begin. This is where we begin delivery of proactive management, administration, monitoring, and support for your cloud environment.

This is the most comprehensive portion of the MSP, including:

- Configuration Management
- Backup, Resilience + BC/DR
- User Access Control
- DevOps
- Infrastructure Monitoring and Alerting
- Environment Monitoring and Alerting
- Security
- Support Tools

### **Configuration Management**

**Patching and Updates** - All Deft Cloud MSP environments receive comprehensive patch and update processes. Patches and updates are automatically applied to the operating system (OS) and any software within the OS repository. You receive a summary on each patch and update as well as a validation of their success.

**Configuration Management Automation** - All Deft Cloud MSP environments are built with a custom, automated configuration management system. This architectural decision ensures all configurations and configuration processes are contained in code and are applied via automated systems to minimize errors and provide detailed, consistent reporting and validation.

**Audit Logging** - All Deft Cloud MSP environments are developed with comprehensive, automated Audit Logging. Comprehensive Audit Logging is configured across the cloud platform and is managed on an ongoing basis. We deliver detailed, consistent reporting and

management so that you are always aware of your cloud's security effectiveness.

**Credential Resets** - All Deft Cloud MSP environments provide complete setup, management and administration of all cloud platform and cloud access control credentials. We validate all credential requests, including resets, to ensure end-to-end compliance and security for your cloud.

**Packaged/Repository App Management** - All Deft Cloud MSP environments include configuration and management of all standard software components or repositories that are part of the OS environment.

### **Backup, Resilience and BC/DR**

**Volume Snapshots/Backups** - All Deft Cloud MSP environments include daily snapshots of all block store volumes. Standard retention policy for volumes is 90-days. Block store snapshots are stored in the cloud platform's default volume snapshot and backup repository. Additional and more detailed snapshot and backup capabilities are available via our Managed VMware Cloud Services.

**File Backups/Restores** - All Deft Cloud MSP environments include the ability to request file restores from full volume snapshots. Should an individual file or set of files need to be restored, a support ticket to our Service Desk will initiate the file restore process for you.

**Long-Term Retention** - All Deft Cloud MSP environments provide for long-term data retention. Long-Term Retention is designed for snapshots, backups and data where availability requirements exceed our standard 90-day system configurations. All Long-Term Retention data is stored in the cloud platform's default volume snapshot and backup long-term repository.



Please note that the time required to execute restore requests of data or files in long-term retention will vary. Contact our Service Desk for all LongTerm Retention recovery requests.

**DR Planning and Drills\*** - An optional service available to Deft Cloud MSPs are standard Disaster Recovery (DR) Planning and Disaster Event Drills. DR Planning and Drills are unique, based upon your business continuity requirements. The types of processes and automation implemented, the drills performed, and their frequency will be specific to your business continuity requirements and environment architecture and directly inform how Drills are conducted.

**Fully Automated DR (DRaaS)\*** - An optional service available to Deft Cloud MSPs is DRaaS. DRaaS provides for the automatic execution of DR operations without requiring manual intervention or event declaration.

### **User Access Control**

**Cloud Account Procurement/Management** - Deft Cloud MSP environments include the procurement, setup and management of the cloud infrastructure. This process enables us to provide comprehensive management and support of the environment.

**Cloud User Identity and Access Management (IAM)/ Role-Based Access Control (RBAC)** - All Deft Cloud MSP environments include setup, configuration, management, and administration of all cloud users within the cloud console. This standardized management process delivers consistency across your cloud platform and full alignment with all governance, security and compliance requirements.

**User Access Change Control** - All Deft Cloud MSP environments include setup, configuration, management and administration of all change controls and change control processes for cloud users within the cloud console. This

standardized management process delivers consistency across your cloud platform and full alignment with all governance, security and compliance requirements.

**OS-Level User Access Control (AD/LDAP/SSH)** - We recommend Deft Cloud MSP environments include setup, configuration, management and administration of all necessary OS-Level UAC controls. Whether your environment utilizes Active Directory, LDAP, SSH or all three control platforms, Deft provides the standardized processes necessary to ensure consistency across your cloud platform and full alignment with all governance, security and compliance requirements.

### **DevOps**

**CI/CD Setup** - We recommend Deft Cloud MSP environments include design, development and setup of an optimized Continuous Integration/Continuous Deployment (CI/CD) pipeline for your applications. This CI/CD pipeline will be unique to your business and designed to meet the needs of your business today and tomorrow.

**CI/CD Management** - We recommend Deft Cloud MSP environments include the ongoing management and refinement of the CI/CD processes. These management processes are based upon the specific application, data, environment and business requirements and changes.

NOTE: In many cases we establish the CI/CD pipeline, set it up, provide management structure and guidance while you execute the day-to-day CI/CD pipeline management.

**Custom Application Lifecycle Management\*** - An optional service available to Deft Cloud MSP environments is the evaluation of your development processes. The goal of Application Lifecycle Management is to establish processes and procedures that are optimized for your current operations and are sustainable over the lifetime of the application.

## ***Infrastructure Alerting and Monitoring***

***OS Health and Performance Monitoring*** - All Deft Cloud MSP environments include comprehensive OS Health and Performance Monitoring. We utilize an agent-based system to provide performance and health statistics from the OS itself. In addition to system availability information, utilization (including CPU, bandwidth, memory, disk, etc.) are also monitored. Access/visibility to this information is available within the monitoring portal, should you wish to see it. Service Desk also receives this information and can address it based upon predefined support rules as necessary.

***Endpoint Health and Performance Monitoring*** - All Deft Cloud MSP environments include comprehensive Cloud Endpoint Health + Performance Monitoring. Access/visibility to this information is available within the monitoring portal, should you wish to see it. Service Desk also receives this information and can address it based upon predefined support rules as necessary.

***Network Performance Monitoring*** - All Deft Cloud MSP environments include comprehensive Cloud Network Performance Monitoring. Your access/visibility to this information is available within the monitoring portal, should you wish to see it. Service Desk also receives this information and can address it based upon predefined support rules as necessary.

***Database Health and Performance*** - All Deft Cloud MSP environments include comprehensive Database Health and Performance Monitoring for cloud-native database services. We utilize cloud-native systems to provide comprehensive performance and health statistics of critical database operations. Service Desk receives this information and addresses it based upon predefined support rules.

***Application Health and Performance*** - We recommend Deft Cloud MSP environments include comprehensive Application Health and Performance Monitoring for all applications deployed within your cloud system. We utilize cloud-native systems to provide comprehensive performance and health statistics of critical application operations. Service Desk receives this information and addresses it based upon predefined support rules.

***Infrastructure Alert Response and Triage*** We recommend Deft Cloud MSP environments include comprehensive Infrastructure Alert Response and Triage for all infrastructure elements.

We utilize cloud-native systems to provide comprehensive performance and health statistics of critical infrastructure operations. Service Desk receives this information and addresses it based upon predefined support rules up to the point of your application.

**AI/ML Correlation\*** - An optional service able to be added to any Deft Cloud MSP, AI/ML Correlation delivers intelligent, automatic analysis of all system events and alerts. This service focuses primarily on non-threshold-based alerting and minimizing false positives (not actionable incidents) to reduce cost and improve operational efficiency and effectiveness. Service Desk also receives this information and can address alerts based upon predefined support rules.

**AI/ML Historical and Log Analysis\*** - An optional service able to be added to any Deft Cloud MSP, AI/ML Historical + Log Analysis delivers intelligent, automatic analysis of historic system event information and alerts. If an event occurs, the service correlates a log to the event and begins addressing the issue immediately. Service Desk also receives this information and can address it based upon predefined support rules.

### **Environment Monitoring and Alerting**

**Environment Change Monitoring** - All Deft Cloud MSP environments include comprehensive Environment Change Management and Monitoring processes. Change in cloud environments is frequent and normal. However, changes outside of formal change management process need immediate attention to mitigate serious risk factors. This is why we focus on the entire cloud environment, including oversight and management of all changes within the environment. Service Desk receives this information and can address it based upon predefined support rules as necessary.

**Environment Usage Delta** - All Deft Cloud MSP environments include comprehensive management and monitoring of Environment Usage statistics. Focused on the entire cloud environment, we provide oversight for all usage variance within the cloud's normal daily operating environment. Unexpected changes in utilization (bandwidth, compute, memory, storage, cloud-native services, etc.) may indicate an anomaly that requires immediate response to remain within cost thresholds.

**Environment Alert Response** - We recommend Deft Cloud MSP environments include the investigation and remediation of the Environment Usage Delta. Service Desk receives this information and addresses it based upon predefined support rules.

**Full Stack Visualization** - All Deft Cloud MSP environments include a detailed dashboard highlighting the entire environment, including resource utilization, services engaged, costs, and more. Whether you are hands on or not with your environment, you can see what's happening, when, where and why as well as see the financial impact of the operation.

### **Security**

**Edge Network Configuration and Network Firewall Rules** - All Deft Cloud MSP environments include the setup, management, administration and change control for the cloud edge network configurations, security policies and firewall rules.

**Data Encryption Enforcement** - All Deft Cloud MSP environments include the implementation of automated encryption processes for all data at rest. Best practices require any data that can be encrypted at rest is encrypted at rest.

**Key Management** - All Deft Cloud MSP environments include setup, management, and administration of system-wide keys. This includes adherence to industry defined, and Deft proven, best practices for key management processes and procedures.

**Application Endpoint Firewall(s)** - All Deft Cloud MSP environments include setup, management and administration of application endpoint security. Rules, management, administration and change management processes are based upon your specific architecture and requirements.

**Compliance Support\*** - An optional service able to be added to any Deft Cloud MSP, we can assist you in addressing your compliance initiatives. In addition to support, we can also highlight and share best practices in the design and operation of compliance processes and procedures.

**Intrusion Detection Systems (IDS) Monitoring** - All Deft Cloud MSP environments include setup, management and administration of cloud-native Intrusion Detection Systems (IDS). IDS Monitoring focuses on ingress and egress to be sure your specific security and IDS requirements are met.

**IDS Alert Response** - We recommend Deft Cloud MSP environments include setup, management and administration of IDS Alert Reponse processes. Service Desk receives this information and addresses it based upon predefined support rules.

## **Support Tools**

**Support/Incident Portal** - All Deft Cloud MSP environments include access to our support portal. All support, monitoring and incident aspects of a your account are managed in this portal.

**Incident Response** - All Deft Cloud MSP environments include Incident Response. Incident Response is triggered by an alert automatically or manually identified within the cloud system. You may also submit an incident declaration through the Support Portal.

**Request Response** - All Deft Cloud MSP environments include the response to customer-specific, proactive requests. Service Desk receives these requests and addresses them based upon predefined support rules.

**Customer Dashboard** - All Deft Cloud MSP environments include a comprehensive Customer Dashboard, which highlights the environment utilization and operation in real time.

**On-Demand Cloud Support (Items Outside of MSP)** - All Deft Cloud MSP environments include the ability for you to request On-Demand support. It should be noted that On-Demand support that is outside the scope of the MSP will likely incur an additional cost and be subject to a different SLA. You will be informed of all options, timeframes and potential costs associated with an On-Demand request before any work is performed.

## Optimize and Evolve

The final component of our Cloud MSP is the ongoing optimization and evolution of your environment. As we manage your environment on a day-to-day basis, we will identify opportunities for improvement and continue to make sure it still aligns with your business objectives. Any opportunities identified are shared directly with your IT and leadership teams to inform strategy and decisions.

This portion of the MSP includes:

- Cost Optimization
- Change Management
- Audit Trails

### *Cost Optimization*

**Historical Usage Analysis** - All Deft Cloud MSP environments include regular Historical Usage Analysis of the environment. The objective of Historical Usage Analyses is to identify the optimum infrastructure required to maintain your day-to-day operations. This optimum infrastructure level maximizes cost optimization and enables the cloud environment to support known fluctuations in your business as needed. Historical Usage Analysis projects can be conducted monthly, quarterly, annually or on-demand, based upon your unique business requirements.

**Cost Allocation** - All Deft Cloud MSP environments include the setup, management and administration of cloud utilization Cost Allocation centers specific to your business. Cost Allocations will change as your business changes. Our regular analysis and optimization of your environment will ensure your cloud costs remain attributed where appropriate. If cost centers do not exist in your business today, we can guide you through the implementation and introduction of this process to the business.

**Procurement** - All Deft Cloud MSP environments include the procurement of the cloud infrastructure necessary for your business. Deft's setup, management and administration of this infrastructure ensures you can take full advantage of the cost and operational benefits of your cloud.

**Regular Usage Reporting and Review** - All Deft Cloud MSP environments include regular Usage Analysis of Account Subscriptions. The objective of this analysis is to identify the optimal Account configuration necessary for your day-to-day operations. Regular Usage Reporting + Review of Account Subscriptions can be conducted monthly, quarterly, annually or on-demand, based upon your unique business requirements.

**Projected Usage Trends and Recommendations** - All Deft Cloud MSP environments include the application of our best practices, applied across your cloud platform. These best practices are aligned with your cloud usage, your business operating plans and your strategy to inform in-depth projections and recommendations for short and long-term cloud requirements.

### *Change Management*

**Cloud Account IAM** - All Deft Cloud MSP environments include Deft assuming full responsibility for Cloud Account IAM processes, including setup, management, change management and administration. Our control of these responsibilities ensures we are able to set up, operate and maintain your cloud environment as efficiently and effectively as possible. However, we do recognize there will be circumstances where this level of assignment is not possible. In these instances, we will work with you to address your specific requirements so all outcomes can be achieved.

**Cloud Infrastructure Resources** - All Deft Cloud MSP environments include Deft assuming full responsibility for Cloud Infrastructure Resources processes, including setup, management, change management and administration. Our control of these responsibilities ensures we are able to set up, operate and maintain your cloud environment as efficiently and effectively as possible. However, we do recognize there will be circumstances where this level of assignment is not possible. In these instances, we will work with you to address your specific requirements so all outcomes can be achieved.

**OS-Level Configuration** - We recommend Deft Cloud MSP environments include Deft assuming full responsibility for OS-Level Configuration processes, including setup, management, change management and administration. Our control of these responsibilities ensures we are able to set up, operate and maintain your cloud environment as efficiently and effectively as possible. However, we do recognize there will be circumstances where this level of assignment is not possible. In these instances, we will work with you to address your specific requirements so all outcomes can be achieved.

**OS-Level UAC** - We recommend Deft Cloud MSP environments include Deft assuming full responsibility for OS-Level UAC processes, including setup, management, change management and administration. Our control of these responsibilities ensures we are able to set up, operate and maintain your cloud environment as efficiently and effectively as possible. However, we do recognize there will be circumstances where this level of assignment is not possible. In these instances, we will work with you to address your specific requirements so all outcomes can be achieved.

**Application Level UAC\*** - An optional service available to Deft Cloud MSP environments is Deft assuming full responsibility for Application Level UAC processes, including setup, management, change management and adminis-

tration of applications Deft develops. Our control of these responsibilities ensures we are able to set up, operate and maintain your cloud environment as efficiently and effectively as possible. However, we do recognize there will be circumstances where this level of assignment is not possible. In these instances, we will work with you to address your specific requirements so all outcomes can be achieved.

## **Audit Trails**

**Cloud Infrastructure Logs** - All Deft Cloud MSP environments include the setup, management and administration of comprehensive Cloud Infrastructure Logging capabilities. Detailed Cloud Infrastructure Logs inform and support IT governance and compliance operations. Environments are architected to log all available Cloud Infrastructure operations, providing the maximum amount of information available. The Cloud Infrastructure Logs are readily available and easily accessible to inform your business and answer the questions you want to answer today are the questions you will have to answer tomorrow.

**OS-Level Logs** - We recommend Deft Cloud MSP environments include the setup, management and administration of comprehensive OS-Level Logging capabilities. Detailed OS-Level Logs inform and support IT governance and compliance operations. Environments are architected to log all available OS operations, providing the maximum amount of information available. The OS-Level Logs are readily available and easily accessible to inform your business and answer the questions you want to answer today are the questions you will have to answer tomorrow.

**Application-Level Logs** - We recommend Deft Cloud MSP environments include the setup, management and administration of comprehensive Application-Level Logging capabilities. Detailed Application-Level Logs inform and support IT governance and compliance operations. Environments are architected to log all available Application operations, providing the maximum amount of information available. The Application-Level Logs are readily available and easily accessible to inform your business and answer the questions you want to answer today are the questions you will have to answer tomorrow.

**Compliance Initiatives** - All Deft Cloud MSP environments are architected to support existing and future compliance initiatives. We ensure all data and processes are in place to achieve your desired outcomes and conduct lead regular reviews to maintain alignment between your cloud, your business and your desired outcomes.

## Customer Success and Service Operations

The foundation of every Deft Cloud MSP is collaboration. All customer success and service operations workflows have been designed to minimize response time, mitigate risk and optimize collaboration so knowledge transfer occurs when and where necessary.

We recognize your business, and your customers, operate 24x7x365. We have designed and operate our business to be here for you, whenever and however necessary to ensure your success.

### Customer Success Team

Deft provides each customer with comprehensive resources to deliver ongoing service and support for your cloud environment. From sales, solution architecture and certified engineer support on our Service Desk, to customer success and executive management sponsorship, you will have experts with you every step of the way.

### How to Contact Deft Support

Deft uses cases to identify incidents and provide support to our clients until the incident is resolved. Case identification and review is conducted using the Deft Customer Portal. Each Deft client is supplied with accounts that are permissioned to create, update and view their cases.

#### *Case Creation – Customer Portal*

Support cases submitted to Deft are submitted using the Deft Customer Portal. The portal is accessible at: <https://portal.deft.com>

To create a support case:

- Log into the Deft Customer Portal.
- Select “Create Case”.
- You receive an automatic confirmation of the successful case creation, including the case number.
- Deft Service Desk staff review the case for accuracy, confirm the Severity Level, and send acknowledgment of case receipt to you.
- Deft Service Desk agent & Cloud Services Engineer work to resolve the support case.
- Case updates are provided at set intervals as determined by the Severity Level.
- Case is Resolved & Marked for Closure.

#### *Case Creation – Telephone*

We recognize there may be times when a support case required the immediacy only a phone call can provide. Support cases may be created by calling the Deft Service Desk at +1 312-829-1111, Ext. 2. Telephone submitted support cases utilize a similar support operation, with a few modifications.

To create a support case:

- Call the Deft Service Desk at +1 312-829-1111, Ext. 2.
- Deft Service Desk Agent verifies caller identity, captures relevant information, creates the support case, and assigns a Severity Level.
- Deft Service Desk agent & Cloud Services Engineer work to resolve the support case.
- Case updates are provided at set intervals as determined by the Severity Level.
- Case is Resolved & Marked for Closure.



## **Case Escalation Paths**

Deft provides several, formal options for support case escalation. Escalations occur to set a support case to a desired Severity Level, as outlined below.

**Primary Escalation Path** - This method is preferred as it is the most efficient method for raising the Severity Level of a case. To create a support case, you will:

- Log into the Deft Customer Portal.
- Navigate to the appropriate case.
- Click the “Escalate Case” link.
- Select the desired Severity Level and submit.

**Alternate Case Escalation Path(s)** - Additional Case Escalation paths are also available. However, it is important to note that Alternate Case Escalation Paths will not be as expedient as the Preferred Escalation Path.

## **Alternate Escalation – Case Response**

You may submit a response to an existing case and simply request an escalation to the desired Severity Level. The Severity Level will be raised once a Service Desk Agent has reviewed and processed the request.

## **Alternate Escalation – Phone Support**

- You may call the Deft Service Desk at +1 312-829-1111, Ext. 2.
- The Deft Service Desk Agent will verify the caller’s identity and the support case number. You verbally request escalation to the desired Severity Level.
- The Deft Service Desk Agent updates the case accordingly.

**Response Time**

All Deft MSP customers can set the severity level of their support cases. The severity level you select will determine the response time. You can select the following severity levels when submitting a support case:

**Infrastructure Administration (Proactive Services)**

Severity Level	Description	Response Time SLA
Critical / Level 1	Critical Issues include business-critical system outages or issues causing extreme business impact.	15-minute response time
High / Level 2	High Severity Level issues include the impairment of production systems, impaired application performance, and moderate business impact.	30-minute response time
Normal / Level 3	Normal Severity Level issues include standard service issue requests and minimal business impact.	1-hour response time
Low / Level 4	Low Severity Level issues include general information requests, questions and guidance from Deft MSP team members, arranging prescheduled maintenance activities.	4-hour response time
Informational / Level 5	Informational Issues include general questions, how-to style requests, or reports.	24-hour response time

As standard business practice, Deft’s Service Desk acknowledges all support cases within 15 minutes of case creation. The response times identified in the table above represent the average time required to remediate such issues. Please note the response time to resolution of your issue may vary based upon circumstances and configurations unique to your business and your cloud architecture. Any support cases created without a severity level selected will be set to “Level 3 – Normal” by default.

## Service Level Agreements

Deft provides multiple Availability SLAs for VMware Cloud MSP customers including:

- Cloud Network Uptime
- Cloud Server Uptime
- Cloud Data Storage Uptime
- Cloud Portal Uptime

The SLA for VMware Cloud Resources will be dependent upon the Cloud Platform(s) selected by Deft and you.

You can find current version of the Cloud Application Management SLA on our website at <https://www.deft.com>.

## Account Reviews

Deft offers quarterly and annual Account Reviews for all Cloud Managed Service Partnerships. These collaborative sessions aim to provide greater visibility into the technical, operational, financial and business aspects of your company and your Cloud. Account Reviews also provide you with a way to offer direct feedback, including areas of improvement, on the status of your Partnership with Deft.

An Account Review agenda includes:

- Introductions
- Technical, Operational, Business Updates
- Service & Performance Metrics/Dashboard Review  
Optimization Recommendations
- SLA Adherence & Support Ticket Review
- Access Control List (ACL) Review Q&A/Discussion

Upon completion of each account review, you should be confident that we are flexing our services and approach to meet you where you are and have a plan to take you where you want to go so that you can focus on what matters most for your customers and your business.

## Responsibility Matrix

We are committed to solving your Cloud challenges so you can focus on what matters most.

Each Deft Cloud Managed Services Partnership operates with the understanding that there are two parties involved in supporting your environment: your in-house experts and ours.

The following responsibility matrix defines the roles and responsibilities for each phase:

Consult Responsibilities		
Managed Service	Deft	Customer
Identify Business Drivers	Y	Y
Align Business Drivers with Project	Y	Y
Current Infrastructure	Y	Y
Current Applications	Y	Y
Application Dependency Mapping	Y	Y

Plan, Design and Build Responsibilities		
Plan and Design Managed Service	Deft	Customer
Greenfield Architecture	Y	N
Total Cost of Ownership	Y	N
Migration Planning	Y	N
Compliance Requirements	Y	N
Hardware Selection Requirements	Y	N
Hardware Procurement	Y	N
Scale Requirements	Y	N
Build Managed Service	Deft	Customer
Proof of Concept / Pilot Environment	Y	N
Environment Build-Out (New)	Y	N
Environment Remediation (Existing)	Y	N
Deployment Automation	Y	N
Resource Planning Setup	Y	N

Run and Operate Responsibilities		
Configuration Management Managed Service	Deft	Customer
Patching and Updates	Y	N
Configuration Management Automation	Y	N
Audit Logging	Y	N
Credential Resets	Y	N
Packaged / Repository Application Management	Y	N
Backup, Resilience & BC/DR Managed Service	Deft	Customer
Volume Snapshots / Backups	Y	N
File Backups / Restores	Y	N
Long-Term Retention	Y	N
DR Planning and Drills (Optional)*	N	Y
Fully Automated DR (DRaaS)	N	Y
User Access Control Managed Service	Deft	Customer
Cloud Account Procurement / Management	Y	N
Cloud User (IAM/RBAC)	Y	N
User Access Change Control	Y	N
OS-Level UAC (AD/LDAP/SSH)	Y	N
SSO Integration	Y	N

**Run and Operate Responsibilities Continued**

<b>DevOps Managed Service</b>	<b>Deft</b>	<b>Customer</b>
CI/CD Setup	Y	N
CI/CD Management	Y	N
Custom Application Lifecycle Management (Optional)*	Y	N
<b>Monitoring and Alerting Managed Service</b>	<b>Deft</b>	<b>Customer</b>
OS Health and Performance	Y	N
Endpoint Health and Performance	Y	N
Network Performance	Y	N
Infrastructure Alert Response and Triage	Y	N
Environment Change Monitoring	Y	N
Environment Usage Delta	Y	N
Environment Response	Y	N
<b>Infrastructure Sparing Managed Service</b>	<b>Deft</b>	<b>Customer</b>
Network Infrastructure Sparing	Y	N
Compute / Server Sparing	Y	N
Storage Appliance Sparing	Y	N

**Run and Operate Responsibilities Continued**

<b>Security Managed Service</b>	<b>Deft</b>	<b>Customer</b>
Edge Network Configuration and Firewall Rules	Y	N
Data Encryption Enforcement	Y	N
Key Management	Y	N
Application Endpoint Firewall(s)	Y	N
Compliance Support	N	Y
IDS Monitoring	Y	N
IDS Alert Response	Y	N
<b>Support Tools Managed Service</b>	<b>Deft</b>	<b>Customer</b>
Support / Incident Portal	Y	N
Incident Response	Y	N
Request Response	Y	N
Customer Dashboard	Y	N
On-Demand Cloud Support (Items Outside of MSP)	Y	N



Optimize and Evolve Responsibilities		
Cost Optimization Managed Service	Deft	Customer
Historical Usage Analysis	Y	N
Capacity Management	Y	Y
Cost Allocation	Y	N
Cloud Architecture Managed Service	Deft	Customer
Planning	N	Y
Regular Usage Reporting and Review	Y	N
Project Usage Trends and Recommendations	Y	N
Change Management Managed Service	Deft	Customer
Cloud Account IAM	Y	N
Cloud Infrastructure Resources	Y	N
OS Level Configuration and UAC	Y	N
Application Level UAC (Optional)*	N	Y
Audit Trails Managed Service	Deft	Customer
Cloud Infrastructure Logs	Y	N
OS-Level Logs	Y	N
Application-Level Logs	Y	N
Compliance Initiatives	Y	N

### Additional Questions

For more information, visit [www.deft.com](http://www.deft.com) or contact us at (312) 829-1111 and [sales@deft.com](mailto:sales@deft.com)

### About Deft

At Deft, we are our clients' most Trusted Advisor.

The Deft team humanizes technology. We actively listen to our clients, learning and collaborating to develop tailored proposals that perfectly fit your company's needs.

We then design, build, operate, secure, and scale unique technology solutions with a singular purpose: to deftly deliver on the promise of technology for you and your customers.

Learn more at [www.deft.com](http://www.deft.com) or contact us at (312) 829-1111.